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APPLICATION NO.	FILING DATE	FIRST NAMED INVENTOR	ATTORNEY DOCKET NO.	CONFIRMATION NO.
10/718,229	11/20/2003	William E. Hedenberg	Hed11	9919
7590	09/28/2005		EXAMINER	
Leo J. Aubel 111 Rivershire Lane Lincolnshire, IL 60069			DUNN, DAVID R	
			ART UNIT	PAPER NUMBER
			3616	
DATE MAILED: 09/28/2005				

Please find below and/or attached an Office communication concerning this application or proceeding.

Office Action Summary	Application No. 10/718,229	Applicant(s) HEDENBERG, WILLIAM E.	
	Examiner David Dunn	Art Unit 3616	

-- The MAILING DATE of this communication appears on the cover sheet with the correspondence address --

Period for Reply

A SHORTENED STATUTORY PERIOD FOR REPLY IS SET TO EXPIRE 3 MONTH(S) OR THIRTY (30) DAYS, WHICHEVER IS LONGER, FROM THE MAILING DATE OF THIS COMMUNICATION.

- Extensions of time may be available under the provisions of 37 CFR 1.136(a). In no event, however, may a reply be timely filed after SIX (6) MONTHS from the mailing date of this communication.
- If NO period for reply is specified above, the maximum statutory period will apply and will expire SIX (6) MONTHS from the mailing date of this communication.
- Failure to reply within the set or extended period for reply will, by statute, cause the application to become ABANDONED (35 U.S.C. § 133). Any reply received by the Office later than three months after the mailing date of this communication, even if timely filed, may reduce any earned patent term adjustment. See 37 CFR 1.704(b).

Status

- 1) ☐ Responsive to communication(s) filed on ____.
- 2a) ☐ This action is **FINAL**. 2b) ☒ This action is non-final.
- 3) ☐ Since this application is in condition for allowance except for formal matters, prosecution as to the merits is closed in accordance with the practice under *Ex parte Quayle*, 1935 C.D. 11, 453 O.G. 213.

Disposition of Claims

- 4) ☒ Claim(s) 1-10 is/are pending in the application.
- 4a) Of the above claim(s) ____ is/are withdrawn from consideration.
- 5) ☐ Claim(s) ____ is/are allowed.
- 6) ☒ Claim(s) 1-10 is/are rejected.
- 7) ☐ Claim(s) ____ is/are objected to.
- 8) ☐ Claim(s) ____ are subject to restriction and/or election requirement.

Application Papers

- 9) ☐ The specification is objected to by the Examiner.
- 10) ☐ The drawing(s) filed on ____ is/are: a) ☐ accepted or b) ☐ objected to by the Examiner.
Applicant may not request that any objection to the drawing(s) be held in abeyance. See 37 CFR 1.85(a).
Replacement drawing sheet(s) including the correction is required if the drawing(s) is objected to. See 37 CFR 1.121(d).
- 11) ☐ The oath or declaration is objected to by the Examiner. Note the attached Office Action or form PTO-152.

Priority under 35 U.S.C. § 119

- 12) ☐ Acknowledgment is made of a claim for foreign priority under 35 U.S.C. § 119(a)-(d) or (f).
- a) ☐ All b) ☐ Some * c) ☐ None of:
1. ☐ Certified copies of the priority documents have been received.
 2. ☐ Certified copies of the priority documents have been received in Application No. ____.
 3. ☐ Copies of the certified copies of the priority documents have been received in this National Stage application from the International Bureau (PCT Rule 17.2(a)).

* See the attached detailed Office action for a list of the certified copies not received.

Attachment(s)

- | | |
|---|--|
| 1) <input checked="" type="checkbox"/> Notice of References Cited (PTO-892) | 4) <input type="checkbox"/> Interview Summary (PTO-413)
Paper No(s)/Mail Date. ____ |
| 2) <input type="checkbox"/> Notice of Draftsperson's Patent Drawing Review (PTO-948) | 5) <input type="checkbox"/> Notice of Informal Patent Application (PTO-152) |
| 3) <input type="checkbox"/> Information Disclosure Statement(s) (PTO-1449 or PTO/SB/08)
Paper No(s)/Mail Date ____ | 6) <input type="checkbox"/> Other: ____ |

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DETAILED ACTION

Claim Objections

1. Claim 1 is objected to because of the following informalities: lines 13-14, "having it rear end" appears to be a typographical error. It appears that "it" should be --its--. Appropriate correction is required.

Claim Rejections - 35 USC § 103

2. The following is a quotation of 35 U.S.C. 103(a) which forms the basis for all obviousness rejections set forth in this Office action:

(a) A patent may not be obtained though the invention is not identically disclosed or described as set forth in section 102 of this title, if the differences between the subject matter sought to be patented and the prior art are such that the subject matter as a whole would have been obvious at the time the invention was made to a person having ordinary skill in the art to which said subject matter pertains. Patentability shall not be negated by the manner in which the invention was made.

3. Claims 1-6 and 8-10 are rejected under 35 U.S.C. 103(a) as being unpatentable over Raidel (4,541,653) in view of Borns et al. (3,850,445).

Raidel discloses an air suspension for a vehicle comprising: an elongated torque arm (22); the forward end pivotally mounted (42) to the chassis, the intermediate section being mounted over the rear axle housing (36), the rear end extending rearwardly of the rear axle housing (see Figure 2); an elongated lever arm (26) with the rear end pivotally mounted to the chassis (via 48) by a bracket (see Figure 5); an air spring (30) mounted on the intermediate section of the lever arm; and the rear end of the torque arm (22) is connected (by 28) to the front end of the lever arm (26). Raidel also shows an end connection which is spaced from the end of the arm (see Figure 14).

Raidel fails to show a shackle connecting the arms.

Borns et al. shows a similar axle suspension system in which shackles (130; see Figure 2) are used for connections between arms; the shackle includes a bushing (138; see Figure 6) for mounting of a leg. Borns shows the front end of the arm connected to the bushing having an O-shaped loop or eye (128). The shackle also has a second bushing (152) for double articulation.

It would have been obvious to one of ordinary skill in the art at the time the invention was made to modify Raidel with the teachings of Borns et al. to connect the two arms with a shackle in order to provide a simplified connection with an additional degree of movement between the arms.

4. Claim 7 is rejected under 35 U.S.C. 103(a) as being unpatentable over Raidel (4,541,653) in view of Borns et al. (3,850,445) and in further view of Stephens (5,427,404).

The combination of Raidel and Borns et al. is discussed above and fails to show a C-shaped loop on the end of the lever arm.

Stephens teaches an arm in a suspension system having a C-shaped loop (16).

It would have been obvious to one of ordinary skill in the art at the time the invention was made to modify the combination of Raidel and Borns et al. with the teachings of Stephens in order to more easily attach the end of the lever arm to the shackle.

Conclusion

5. The prior art made of record and not relied upon is considered pertinent to applicant's disclosure. Stephens et al. ('752) show an axle suspension of interest. Hedenberg ('171) is cited

Art Unit: 3616

to show the prior art discussed in the specification. Hedenberg ('243) shows a suspension arrangement of interest. White, IV shows an air suspension of interest.

6. Any inquiry concerning this communication or earlier communications from the examiner should be directed to David Dunn whose telephone number is 571-272-6670. The examiner can normally be reached on Mon-Fri, 8:30-5:00.

If attempts to reach the examiner by telephone are unsuccessful, the examiner's supervisor, Paul Dickson can be reached on 571-272-6669. The fax phone number for the organization where this application or proceeding is assigned is 571-273-8300.

Information regarding the status of an application may be obtained from the Patent Application Information Retrieval (PAIR) system. Status information for published applications may be obtained from either Private PAIR or Public PAIR. Status information for unpublished applications is available through Private PAIR only. For more information about the PAIR system, see <http://pair-direct.uspto.gov>. Should you have questions on access to the Private PAIR system, contact the Electronic Business Center (EBC) at 866-217-9197 (toll-free).

A handwritten signature in black ink, appearing to read 'David Dunn', with a long horizontal line extending to the right.

David Dunn
Primary Examiner
Art Unit 3616